

10. It has been suggested to the Lieutenant-Governor that it may under certain circumstances be possible to allow people who have sufficient accommodation in their own houses to provide hospital accommodation for their sick relatives on the spot. This is a matter on which it is impossible to give any decision of general application. A spacious house standing in a large garden at a distance from all habitations and so situated that adequate arrangements could be made by the authorities to regulate egress and ingress without detaching an unduly large portion of the available police force might, if approved for the purpose by the medical and executive authorities, and if all additional expenditure entailed by the arrangement were defrayed by the residents, be suitable for the purpose indicated; but ordinarily the evacuation of the infected area must be insisted on so long as it is possible to work upon this mode of dealing with a visitation of plague. It is unlikely that it will be feasible to lend the services of medical officers or to give separate police contingents to preserve isolation if small hospitals of this character are established at a distance from the spot where the resources of Government are concentrated; and it must be assumed that unless in very exceptional circumstances the use of no private house for hospital purposes would be sanctioned by the authorities; but particular cases can be considered on their merits.

11. There is one other matter of primary importance to which public attention should be invited. One of the difficulties with which this Government has already been brought face to face in the course of measures for the prevention of the spread of plague is the provision of qualified female medical attendants and nurses. But in the event of the spread of plague to any large centre in the Punjab there would be large scope for work by female volunteers, even if unqualified by hospital or medical knowledge, more particularly among the females of their own community or caste, but to some extent also among the female population in general. The Lieutenant-Governor trusts that it is not altogether out of the question that a few such in certain localities and among the more enlightened classes should offer their services for the general welfare.

12. It is now of urgent importance that the matters dealt with in the foregoing paragraphs should receive early attention; and every opportunity should be taken of directing public notice to these remarks and of inviting help and co-operation in the attainment of the objects in view, it being always understood that proposals for the alteration of those main principles of action which are already determined should not be put forward because they cannot be entertained.

ORDER.—Ordered that the foregoing remarks be published in the *Punjab Gazette* and circulated to the Public Press; and that a copy be sent to each Commissioner and Deputy Commissioner, to the Inspector-General of Civil Hospitals, the Sanitary Commissioner, and to each Civil Surgeon in the Punjab for information and guidance, in continuation of the circular from this office, No. 1342, dated 8th November 1897.

By order of the Hon'ble the Lieutenant-Governor,

H. J. MAYNARD,

Junior Secretary to Government, Punjab.

APPENDIX A.

Materials required for hutting.

The required materials are—

- Bamboos.
- Sirkis (or thatched cart-covers).
- Grass-string.
- Thatching grass, (phús or kana).

For a large hut such as is made by gbaramis (thatchers) five bamboos are required on each side, and five have to be split for cross pieces; four also are required on each side for making the end tattis. Total number of bamboos twenty-three.

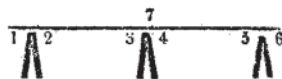
Two or three pairs of sirkis are required for each hut according to size.

Five maunds of grass-string will suffice for sheds for a village of 1,200 people.

At Khán Kbanán three pairs of sirkis were used for each hut; which was also well coated outside with phús grass. The tattis at the end were made entirely of this grass. These huts were considered warm, probably proof against winter rain and easily portable from one village to another. (There is no objection to transporting huts elsewhere when it is quite certain that no infected person has been in them).

In huts such as these, 100 people, or 25 families, could be provided for with about 575 bamboos and 75 pairs of sirkis.

But very fair huts can be made with much less material. Five or seven bamboos can be arranged thus—



with a network of string on to which the sides of the makki stalks are tied.

The villagers also make very good huts themselves with a few bamboos and a little sirki. In Khán Khanán they made big huts with no grant-in-aid except string. But such huts are not portable.

APPENDIX B.

Extracts from remarks recorded by Lieutenant-Colonel C. F. Massy, Commissioner and Superintendent, Jullundur Division, on measures taken in the infected villages of Jullundur and Hoshárpur, dated Camp Phagwara, 13th December 1897.

10. * * * * Blankets are necessary for an out-break in December or January, so as to avoid risk of pneumonia. They are supplied only to persons in actual need of them, usually about 20 per cent of the population. *Buris* (or grain sacks) should be supplied for the bullocks and milch cows. They can be procured (second hand) for about three annas a piece, * * * *. Blankets are also given to the Police, town watchmen and chaukidars employed on cordon duty.

11. It is most important to arrange from the very start for an efficient Police cordon round the hospital and segregation camps. The essence of our measures is the protection of the outside healthy population from infection. In the earlier stage (when we are only dealing with two or three cases and a small segregation camp) the Police arrangements are simple enough. We have merely to post sentries, night and day, round the camps and to see that no unauthorized person has ingress or egress.

12. But when the whole village is turned out to occupy a number of small camps the Police duties become more severe, and a large force is required to ensure the thorough efficiency of the cordon. At Khán Khanán (population 2,300 souls) we are employing—

One Inspector.
One Deputy Inspector.
Four Sergeants.
Sixty-five Constables.
Six Town Police.
Forty-five Village Chaukidars.
Total one hundred and twenty rank and file.

This number is found barely sufficient for our requirements. By day the people are allowed to wander about within the village agricultural limits and pursue their ordinary avocations. In fact they are encouraged to work within these limits as if there were no sickness. They are only debarred entering the houses within the village site. This necessitates a chain of sentries, within view of each other, all round the boundary of the village lands, and another chain around the village site. Before nightfall the people are assembled in their various camps, and a roll-call is made. The sentries are then closed in round the camps, and no egress allowed until dawn.

13. The force required for cordon purposes depends upon the extent and shape of the village agricultural boundaries. Deputy Commissioners should settle with the District Superintendent, Police, on the occurrence of the first out-break of plague, what their police requirements will be for cordon purposes. * * * * *

16. We found the people of all castes and classes preferred putting up their own huts. We gave two rupees for every hut made ready within twenty-four hours as a grant-in-aid, and one rupee for huts finished within a week. Most of the people were able to claim the former reward. We supplied, *gratis*, bamboos, string and *sirkis*. The villagers supplied their own *chari*-stalks and straw, also rough poles for roofs and sides and doors. It is astonishing how comfortable they made themselves in a marvellously short space of time with the rough materials at hand. They are allowed to build in any fashion they please; a street usually runs through the camp, and the cattle are tethered at the backs of the huts in roughly-made sheds, or are kept in the open with *jhuls* of grain-sacks, or under trees. A special batch of *gharamis* (thatchers) is required for building the hospital sheds, and for helping such of the villagers as are unable to make sheds for themselves.